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FOREST PRODUCTS LABORATORY LIST OF PUBLICATIONS

ON

WOOD PRESERVATION

April 1963

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Forest Products Laboratory
Forest Service
U.S. Department of Agriculture
Madison 5, Wisconsin
In cooperation with the University of Wisconsin

FOREST PRODUCTS LABORATORY LIST OF
PUBLICATIONS ON WOOD PRESERVATION¹

TABLE OF CONTENTS

This list, which begins on page 3, includes publications that give general information and the results of research by the Forest Products Laboratory on preservative materials, methods of application, durability and service records of treated and untreated wood in various forms.

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¹This list was previously issued as Forest Products Laboratory Report No. 704 under the same title.

INSTRUCTIONS FOR OBTAINING PUBLICATIONS

Publications available for distribution at this Laboratory are marked with an asterisk (*).

Single copies of technical notes, reprints, and processed reports may be obtained free upon request from the Director, Forest Products Laboratory, Madison 5, Wis.

Federal Government bulletins, circulars, and leaflets, if not available for free distribution at this Laboratory, may be purchased at the price indicated from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Send money order, draft, or cash; stamps or personal checks are not accepted.

Trade journals containing articles herein listed may be purchased from the publishers or consulted in various libraries.

The Forest Products Laboratory reserves the right to furnish only those publications which in its judgment will give the information requested. Blanket requests or requests for a large number of copies of any individual article will not be filled except in unusual cases.

DETERIORATION

Chemical

Journal Articles

- *Wood in chemical engineering construction, by R. H. Baechler. Preprint For. Prod. Res. Soc. 8th Annual Natl. Meeting, Grand Rapids, Mich., May 1954.
- *Iron stain from metal fastenings may accelerate decay in some woods, by R. L. Krause, Jour. For. Prod. Res. Soc. 4(2):103, Apr. 1954.

Decay and Durability

Bulletins and Circulars

- *Protection from wood-destroying organisms (mold, stain, decay). Separate from the Forest Products Laboratory's "Wood Handbook." USDA Handbook No. 72.²

Journal Articles

- *Causes and prevention of decay of wood in cooling towers, by R. H. Baechler, J. O. Blew, and C. G. Duncan. American Society of Mechanical Engineers, publication 61-PET-5, Sept. 1961.
- *Decay resistance and dimensional stability of five modified woods, by A. J. Stamm and R. H. Baechler. For. Prod. Jour. 10(1):22-26, Jan. 1960.
- *Decay resistance of baldcypress heartwood, by R. N. Campbell and J. W. Clark. For. Prod. Jour. 10(5):250-253, May 1960.
- *Comparative decay resistance of some common pines, hemlock, spruce, and true fir, by Joe W. Clark. Forest Science 3(4):314-320, Dec. 1957.

²

Available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. \$2.00.

DETERIORATION (continued)

Decay and Durability (continued)

Journal Articles (continued)

A partial list of fungi associated with decay of wood products in the United States, by E. B. Cowling. Plant Disease Reporter 41(10):894-896, Oct. 15, 1957.

*Decay and toughness losses in southern pine infected by peniophora, by R. M. Lindgren and E. C. O. Erickson. For. Prod. Jour. 6(6):201-204, June 1957.

*Decay resistance of western redcedar, by T. C. Scheffer. Jour. of Forestry, 55(6):434-442, June 1957.

Tests of decay resistance of four western pole species, by Theodore C. Scheffer and George H. Englerth. Jour. Forestry 58(3):556-561, 1955.

A study of timber decay in the Crucible mine of the Crucible Fuel Co., by E. R. Maize, T. C. Scheffer, and H. P. Greenwald. Bureau of Mines, Rept. Invest. 3544, 17 pp., illus., Jan. 1941.

Defects in crossties caused by fungi, by C. Audrey Richards. Cross Tie Bull., V.19, pp. 3-31, Mar. 1938.

Decay of poles and fungi which cause it, by C. J. Humphrey. Report of special committee on wood preservation, Amer. Elec. Ry. Eng. Assn., 312 Appendix A, 1923. pp. 52-63.

Processed Reports

*68 Factors that influence the decay of untreated wood in service and comparative decay resistance of different species. Revised 1958.

Technical Notes

*F-15 Effect of time of cutting timber on its durability. Reissued 1958.

*F-33 Comparative durability of green and seasoned timber. Reissued 1958.

DETERIORATION (continued)

Decay and Durability (continued)

Technical Notes (continued)

- *101 Comparative value of timber cut from live and dead trees. Reissued 1958.
- *189 Differences between heartwood and sapwood. Reissued 1952.
- *229 Comparative decay resistance of heartwood of different native species when used under conditions that favor decay. Revised 1961.
- *251 Prevention and control of decay in dwellings. Reissued 1962.

Heat

Journal Articles

Rate of temperature change in short-length round timbers, by J. D. MacLean. Trans. Amer. Soc. Mech. Engr., V. 68, No. 1, pp. 1-16, incl., Jan. 1946.

Effect of oven heating and hot pressing on strength properties of wood, by J. D. MacLean. AWWPA Proc.³ 1955.

*Effect of heating in water on the strength properties of wood, by J. D. MacLean. AWWPA Proc. 1954.

Effect of steaming on the strength of wood, by J. D. MacLean. AWWPA Proc. 1953.

Effect of temperature on the dimensions of green wood, by J. D. MacLean. AWWPA Proc. 1952.

Rate of disintegration of wood under different heating conditions, by J. D. MacLean. AWWPA Proc. 1951.

³American Wood-Preservers' Association Proceedings.

DETERIORATION (continued)

Marine Borers

Processed Reports

- *1773 Results of experiments on the effectiveness of various preservatives in protecting wood against marine-borer attack, by J. D. MacLean. 1949. Information Reviewed and Reaffirmed 1959.

HEAT CONDUCTION STUDIES

RELATING TO WOOD PRESERVATION

Technical Notes

- *259 Temperatures necessary to kill fungi in wood. 1956.

Journal Articles

Effect of oven heating and hot pressing on strength properties of wood, by J. D. MacLean. AWP A Proc. 1955.

Studies of heat conduction in wood:

Pt. 1. Results of steaming green round southern pine timber, by J. D. MacLean. AWP A Proc. 1930.

Pt. 2. Results of steaming green sawed southern pine timber, by J. D. MacLean. AWP A Proc. 1932.

Processed Reports

- *1299 The rate of temperature change in wood panels heated between hot plates, by J. D. MacLean. 1942. Information Reviewed and Reaffirmed 1960.
- *1609 Temperatures obtained in timbers when the surface temperature is changed after various periods of heating, by J. D. MacLean. 1946. Information Reviewed and Reaffirmed 1962.

PRESERVATIVES

Application Methods

Bulletins and Circulars

- *Preservative treatment of fence posts and farm timbers, by J. O. Blew and F. J. Champion. U.S. Dept. Agr. Farm. Bull. 2049. Slightly revised 1956.
- *Preservative treatment of wood by pressure methods, by J. D. MacLean. U.S. Dept. Agr. Handbook 40, 1952.
- Passage of liquids, vapors and dissolved materials through softwoods, by A. J. Stamm. U.S. Dept. Agr. Tech. Bull. 929, 1946. Out of Print.

Journal Articles

- *Oscillating pressure treatment of 10 U.S. woods, by J. O. Blew, Jr., S. T. Henriksson, and M. S. Hudson. For. Prod. Jour. 11(6):275-282, June 1961.
- *The gluing of treated lumber, by M. L. Selbo. AWWA Proc., Vol. 56, 1960.
- *Treating hardwood posts by the double-diffusion method, by R. H. Baechler, E. Conway, and H. G. Roth. For. Prod. Jour. 9(7):216-220, July 1959.
- *Improving wood's durability through chemical modification, by R. H. Baechler. For. Prod. Jour. 9(5):166-171, May 1959.
- Development and use of results-type specifications for pressure and non-pressure treatments--heavy retentions of creosote, piling, by R. H. Baechler. AWWA Proc., Vol. 53, pp. 73-76, 1957.
- *Influence of fungus infection associated with chemipeeling on pressure impregnation and cold soaking of jack pine posts, by Edward Panek. For. Prod. Jour. 7(4):124, Apr. 1957.
- *Newer preservative treatments for wood, by R. H. Baechler. Applied Microbiology 4(5):229-232, Sept. 1956.

PRESERVATIVES (continued)

Application Methods (continued)

Journal Articles (continued)

- *Exploratory tests to increase preservative penetration in spruce and aspen by mold infection, by George Schulz. For. Prod. Jour. 6(2):77-80, Feb. 1956.

- *Relations between gage retentions and amounts of creosote extractable from borings taken from treated pine poles, by R. H. Baechler. AWPA Proc. 1954, pp. 113-121.

- Double diffusion treating of wood, by R. H. Baechler. Chem. & Eng. News 32(43):4288, Oct. 25, 1954.

- *Effects of treating variables on absorption and distribution of chemicals in pine posts treated by double diffusion, by R. H. Baechler. Jour. For. Prod. Res. Soc. 3(5):170-176, Dec. 1953.

- Protecting wood from decay and fire, by G. M. Hunt. Arch. Record, Dec. 1953.

- *Production of preservative-treated laminated timbers, by T. R. Truax, J. O. Blew, and M. L. Selbo. AWPA Proc. 1953.

- Treatability of southern yellow pine as influenced by fungus infection, by J. O. Blew. For. Prod. Res. Soc. Jour. 2(3):85-86, Sept. 1952.

- *Permeability of southern pine as affected by mold and other fungus infection, by R. M. Lindgren. AWPA Proc., V. 48, p. 158, 1952.

- Factors that have an important bearing on the preservative treatment of round timbers, by J. D. MacLean. AWPA Proc. 1950.

- Diffusion in wood, by H. K. Burr and A. J. Stamm. Jour. Phys. Chem., 51, 240, Jan. 1947.

- Determination of nickel and copper chromates and nickel, copper, and magnesium arsenates in treated wood, by R. H. Baechler and Philip Servais. AWPA Proc. 1942.

PRESERVATIVES (continued)

Application Methods (continued)

Journal Articles

Effect of blue stain on the penetration of liquids into air dry southern pine wood, by R. M. Lindgren and T. C. Scheffer. AWP A Proc. 1939, pp 325-326.

Processed Reports

- *WP-10 The osmose preservatives and processes. 1958.
- *WP-39 Some companies that design or build wood-preserving plants.
1962.
- Aspen The preservative treatment of aspen, by Frank Kaufert. Avail-
Rept. able at the Lake States Forest Experiment Station, University
No. 19 Farm, St. Paul, Minn.
- *Pacific Treatment of Hawaiian grown wood posts by the double-diffusion
Southwest wood preservation process, by Harvey H. Smith and Roy H.
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Sta. Res. Station, Forest Service, U.S. Department of Agriculture,
Note 187 Berkeley, Calif. Aug. 1961.
- *621 Preservation of timber by the steeping process. 1954. Informa-
tion Reviewed and Reaffirmed 1959.
- *761 The preservative treatment and staining of shingles, by F. L.
Browne. Revised 1960.
- *919 Preservative treatment of window sash and other millwork, by
F. L. Browne. Information Reviewed and Reaffirmed 1958.
- *982 Making log cabins endure. Revised 1960.
- *1006 Wood seats for stadiums. Revised 1958.
- *1158 Tire-tube method of fence post treatment, by R. M. Wirka.
Revised 1962.
- *1260 Determination of nickel and copper chromates and nickel, copper,
and magnesium arsenates in treated wood. 1941. Information
Reviewed and Reaffirmed 1960.

PRESERVATIVES (continued)

Application Methods (continued)

Processed Reports (continued)

- *1445 Treating wood by the cold-soaking method, by J. O. Blew. 1944.
 Reprinted 1963.
- *1674 Diffusion in wood. 1946. Information Reviewed and Reaffirmed
 1962.
- *1955 How to treat fence posts by double diffusion, by R. H. Baechler.
 Revised 1961.
- *2043 Study of the preservative treatment of lumber--A comparison of
 the results of treatment, by pressure and nonpressure proc-
 esses, on end matched Douglas-fir and shortleaf pine lumber,
 by J. O. Blew. 1955. Information Reviewed and Reaffirmed
 1960.
- *2054 Condition of preservative treated field boxes after 5 years of out-
 door exposure, by R. S. Kurtenacker, T. C. Scheffer, and
 J. O. Blew. 1956. Information Reviewed and Reaffirmed 1962.
- *2085 Preservative treatment of jack pine and longleaf pine posts by the
 hot-and-cold bath and its boiling-in-water adaptation, by
 Edward Panek. 1957. Information Reviewed and Reaffirmed
 1963.
- *2098 The preservative treatment of wood for farm use, by J. O. Blew.
 1957. Information Reviewed and Reaffirmed 1963.
- *2166 Preservatives for wood pallets, by J. O. Blew. 1959.

Technical Notes

- *165 When preservative treatment of wood is an economy. Revised
 1962.

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Evaluation of Properties

Journal Articles

- *Studies on the assay of pressure-treated lumber, by R. H. Baechler, J. O. Blew, and H. G. Roth. AWP A Proc. 58:21-33, 1962.
- *Effect of petroleum carrier on rate of loss of pentachlorophenol from treated stakes, by R. H. Baechler and H. G. Roth. For. Prod. Jour. 12(4):187-190, Apr. 1962.
- *Results of preservative treatment of Douglas-fir from different areas, by J. O. Blew, Jr. AWP A Proc. 1961.
- *Effect of preservatives on block-shear values of laminated red oak over a 3-year period, by M. L. Selbo. AWP A 55:155-164, 1959.
- *The relative preservative tolerances of 18 wood-destroying fungi, by E. B. Cowling. For. Prod. Jour. 7(10):355-359, Oct. 1957.
- *Effects of some preservative treatments on the flammability of wood, by H. D. Bruce. AWP A Proc. 1956, Vol. 52, pp. 11-23.
- *Laboratory leaching and decay tests on pine and oak blocks treated with several preservative salts, by R. H. Baechler and H. G. Roth. AWP A Proc. 1956, Vol. 52, pp. 24-33.
- An international termite exposure test, by G. M. Hunt and T. E. Snyder. AWP A Proc. 1947, 1948, 1949, 1952.
- *An international termite exposure test, by J. O. Blew and H. R. Johnston. AWP A Proc. 1956 and 1957 (Final Report).
- *The toxicity of preservative oils before and after artificial aging, by R. H. Baechler. AWP A Proc. 1949.
- Corrosion of metal fastenings in zinc chloride-treated-wood after 20 years, by R. H. Baechler. AWP A Proc. 1949.
- *Relations between the chemical constitution and toxicity of aliphatic compounds, by R. H. Baechler. AWP A Proc. 1947.
- ASTM--Standard method of soil-block testing. Report of Committee D-7. 1956.

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Evaluation of Properties (continued)

Journal Articles (continued)

*Toxicity of normal aliphatic alcohols, acids, and sodium salts, by R. H. Baechler. AWPB Proc. 1939.

First report on tests of service life of poles in REA--financed electric systems, by J. W. Kulp and J. O. Blew. Rural Electrification Administration Bull. 169-29, May 1955.

....*Same. Second report by J. W. Kulp. Rural Electrification Administration Bull. 169-32, Feb. 1957.

*Some experiences of the Forest Service with treated wood, by J. O. Blew. AWPB Proc. 1955, p. 251.

*Evaluating wood preservatives by soil-block tests:

1. Effect of the carrier on pentachlorophenol solutions.
2. Comparison of a coal-tar creosote, a petroleum containing pentachlorophenol or copper naphthenate and mixtures of them.
3. The effect of mixing a coal-tar creosote and a pentachlorophenol solution with a petroleum; a creosote with a coke-oven tar or pentachlorophenol solution.
4. Creosotes.
5. Lignite-tar and oil-tar creosotes.
6. Exploratory tests toward improving the method.
7. Progress on the development of a laboratory weathering method.
8. Low temperature coal-tar creosote.
9. Influence of different boiling fractions of the petroleum carrier on the effectiveness of pentachlorophenol and copper naphthenate.
10. Effect of species of wood on preservative threshold values.

Series published in AWPB Proc. 1950-1958, by Catherine G. Duncan.

*Relations between gage retentions and amounts of creosote extractable from borings taken from treated pine poles, by R. H. Baechler. AWPB Proc. 1954, pp. 113-121.

*Soil-block and agar-block techniques for evaluation of oil-type preservatives: Creosote, copper naphthenate, and pentachlorophenol, by C. G. Duncan. Forest Path. Spec. Release No. 37, 1953.

PRESERVATIVES (continued)

Evaluation of Properties (continued)

Journal Articles

- *Toxicity of various fractions of low-temperature coal-tar creosote, by R. H. Baechler. AWPAProc. 1953.
- Some toxicity data and their practical significance, by E. Bateman and R. H. Baechler. AWPAProc. 1937.
- Reports of preservatives committees, by R. H. Baechler, et al. Prepared for annual meeting of AWPAProc., Apr. 1951-52-53.
- *Evaluating wood preservatives, by J. O. Blew, C. A. Richards, and R. H. Baechler. Forest Products Research Society Proc., 1951.
- *Naval stores and derivatives as wood preservatives, by R. H. Baechler. South. Lbrmn. 183(2297):160-162, Dec. 15, 1951.
- *The durability of birch plywood treated with wood preservatives and fire-retarding chemicals, by J. O. Blew and W. Z. Olson. AWPAProc. 1950.
- *Post service records: Report of Committee U-5 (Committee 7-9 prior to 1948). AWPAProc. annually.
- Laboratory methods for evaluating wood preservatives: Preliminary comparison of agar and soil culture techniques using impregnated wood blocks, by C. A. Richards and R. M. Addoms. AWPAProc. 1947.
- *Oxidation of creosote: Its significance in timber treating operations, by M. S. Hudson and R. H. Baechler. AWPAProc. 1940.
- A relation between chemical constitution and toxicity, by R. H. Baechler and E. Bateman. AWPAProc. 1936.
- Toxicity in relation to the position and number of chlorine atoms in certain chlorinated benzene derivatives, by Ira Hatfield. AWPAProc. 1935.

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A theory of the mechanism of the protection of wood by preservatives:

- Pt. 1. A theory of the mechanism of protection of wood by preservatives, by E. Bateman. AWP A Proc. 16:251, 1920.
- Pt. 2. Isolation of barren oil from coal-tar creosote and a mathematical proof of the existence of solubility partition, by E. Bateman. AWP A Proc. 17:506, 1921.
- Pt. 3. Experimental proof of the theory by means of the toxicity and solubility partition of a number of tar acids, by E. Bateman. AWP A Proc. 18:70, 1922.
- Pt. 4. Experiments with hydrocarbons, by E. Bateman and C. Henningsen. AWP A Proc. 19:136, 1923.
- Pt. 5. Further work on hydrocarbons, by E. Bateman and C. Henningsen. AWP A Proc. 20:33, 1924.
- Pt. 6. Toxic principles of creosote, by E. Bateman and C. Henningsen. AWP A Proc. 21:22, 1925.
- Pt. 7. Some experiments on the toxicity of inorganic salts, by E. Bateman and R. H. Baechler. AWP A 23:41, 1927.

Processed Reports

- *Research Comparison of wood preservatives in Mississippi post study
Note No. (progress report), by J. O. Blew and John W. Kulp. 1963.
01
- *Research Comparison of wood preservatives in stake tests (progress re-
Note No. port), by J. O. Blew. 1963.
02
- *1180 Experiments on toxicity, leaching, and fire-retarding effective-
ness of Wolman salts, by R. H. Baechler. 1938. Information
Reviewed and Reaffirmed 1959.
- *1222 Some toxicity data and their practical significance, by E. Bate-
man and R. H. Baechler. 1937. Information Reviewed and
Reaffirmed 1959.

PRESERVATIVES (continued)

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Processed Reports (continued)

- *1447 Experiments with preservatives for soybean glue and soybean-glued plywood, by F. H. Kaufert and J. O. Blew. 1944. Information Reviewed and Reaffirmed 1959.
- *1682 Effects of wood preservatives on electrical moisture-meter readings. Information Reviewed and Reaffirmed 1958.
- *1726 Service tests on posts as a means of evaluating wood preservatives and methods of treatment, by J. O. Blew. 1948. Information Reviewed and Reaffirmed 1962.
- *1773 Results of experiments on the effectiveness of various preservatives in protecting wood against marine-borer attack, by J. D. MacLean. 1949. Information Reviewed and Reaffirmed 1959.
- *2005 Service records on treated and untreated fence posts, by J. O. Blew and J. W. Kulp. Revised 1959.
- *2114 Studies of the methodology of soil-block testing, by C. G. Duncan. 1958.
- *2234 A review of articles on methods for determining arsenic, boron, chlorine, fluorine, and zinc in various materials, by Lucia S. Phillips and R. H. Baechler. 1961.
- *2260 Present status of results-type specifications for treated wood, by R. H. Baechler. 1962.

Technical Notes

- *163 Determining penetration of wood preservatives. Revised 1952.

PRESERVATIVES (continued)

Materials

Journal Articles

- *Wood preservation statistics. Reported annually for the previous year. Forest Service, U.S. Department of Agriculture in cooperation with the AWP (Proc.).
- Wood seats for stadiums, by R. M. Wirka. Eng. News-Record, Apr. 30, 1931.
- Water-repellent preservatives for wood, by F. L. Browne. Arch. Rec. 105(3):131-132, 174, illus., 1949.
- *Wood preservatives in the national emergency, by G. M. Hunt. Forest Products Research Society Proc. 1951.
- Preservatives for wood poles, by J. O. Blew. Purchasing, Apr. 1946.

Processed Reports

- *WP-6 Partial list of producers and dealers of chemicals used in double-diffusion treatment of wood. 1958.
- *WP-7 Coal-tar creosote producers and dealers in the United States. 1962.
- *WP-9 Zinc chloride producers and dealers in the United States. 1952. Information Reviewed and Reaffirmed 1960.
- *WP-50 Partial list of suppliers of pentachlorophenol wood preservatives. 1960.
- *761 The preservative treatment and staining of shingles, by F. L. Browne. Revised 1960.
- *1006 Wood seats for stadiums. Revised 1958.

PRESERVATIVES (continued)

Materials (continued)

Technical Notes

- *177 Properties of a good wood preservative. Reissued 1957.

PRODUCTS

Crossties

Bulletins and Circulars

- *Poles, piling, and ties. Separate from the Forest Products Laboratory's "Wood Handbook," USDA Handbook No. 72.²

Journal Articles

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Percentage renewals and average life of railway ties, by J. D. MacLean. Eng. News-Record, Aug. 26, 1926; Cross Tie Bulletin, Sept. 1926.

Defects in crossties caused by fungi, by C. Audrey Richards. Cross Tie Bulletin, Vol. 19, pp. 3-31, Mar. 1938.

Comparative strength properties of wood for crossties, by L. J. Markwardt. Cross Tie Bulletin, Nov. 1930; Ry. Eng. & Maintenance, Jan. 1931.

Preservative treatment of Engelmann spruce ties, by J. D. MacLean. AWP A Proc. 1930, pp. 164-182.

Processed Reports

- *886 Percentage renewals and average life of railway ties, by J. D. MacLean. 1926. Information Reviewed and Reaffirmed 1957.

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Crossties (continued)

Processed Reports (continued)

- *1944-3 Englemann spruce and its preservative treatment for ties and mine timbers, by L. W. Wood and J. O. Blew. 1953.

Lumber, Millwork, and Timbers

Journal Articles

- *Studies on the assay of pressure-treated lumber, by R. H. Baechler, J. O. Blew, and H. G. Roth. AWP A Proc. 58:21-33, 1962.
- *Effect of solvent on gluing of preservative treated red oaks, Douglas-fir, and southern pine, by M. L. Selbo. AWP A Proc. 1961.
- Wood seats for stadiums, by R. M. Wirka. Eng. News-Record, Apr. 30, 1931.
- *Laminating of preservative-treated wood, by M. L. Selbo. AWP A Proc. Vol. 53, pp. 73-76, 1957.
- *Some experiences of the Forest Service with treated wood, by J. O. Blew. AWP A Proc. 1955.
- *Production of preservative-treated laminated timbers, by T. R. Truax, J. O. Blew, and M. L. Selbo. AWP A Proc. 1953.
- *The durability of birch plywood treated with wood preservatives and fire-retarding chemicals, by J. O. Blew and W. Z. Olson. AWP A Proc. 1950.
- Water-repellent preservatives for wood, by F. L. Browne. Arch. Rec. 105(3):131-132, 174, illus., 1949.

PRODUCTS (continued)

Lumber, Millwork, and Timbers (continued)

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- *621 Preservation of timber by the steeping process. 1954. Information Reviewed and Reaffirmed 1959.
- *761 The preservative treatment and staining of shingles, by F. L. Browne. Revised 1960.
- *919 Preservative treatment of window sash and other millwork, by F. L. Browne. Information Reviewed and Reaffirmed 1958.
- *982 Making log cabins endure. Revised 1960.
- *1006 Wood seats for stadiums. Revised 1958.
- *1445 Treating wood by the cold-soaking method, by J. O. Blew. 1944. Reprinted 1963.
- *1789 Summary of information on gluing of treated wood, by M. L. Selbo. Revised 1959.
- *2043 Study of the preservative treatment of lumber--A comparison of the results of treatment, by pressure and nonpressure processes, on end matched Douglas-fir and shortleaf pine lumber, by J. O. Blew. 1955. Information Reviewed and Reaffirmed 1960.
- *2077 Effects of moisture on bacterial weakening of casein-bonded plywood, by C. G. Duncan. 1957. Information Reviewed and Reaffirmed 1963.

Technical Notes

- *251 Prevention and control of decay in dwellings. Reissued 1962.

PRODUCTS (continued)

Posts, Poles, and Piling

Bulletins and Circulars

- *Poles, piling, and ties. Separate from the Forest Products Laboratory's "Wood Handbook." U.S. Department of Agriculture Handbook No. 72.²
- *Preservative treatment of fence posts and farm timbers, by J. O. Blew and F. J. Champion. U.S. Department of Agriculture Farm. Bul. 2049. Slightly revised 1956.

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- *Further data on the extraction of creosote from marine piles, by R. H. Baechler and H. G. Roth. AWPA Proc. 1961.
 - *Extraction of creosote from marine piles of variable age and condition, by R. H. Baechler and H. G. Roth. AWPA Proc. 1960.
 - *Results of groundline treatments one year after application to western red-cedar poles, by E. Panek. AWPA Proc. 1960.
 - *Extraction of borings from Douglas-fir piling, by R. H. Baechler. AWPA Proc. 1959.
 - *Determination of retentions of oil preservatives in heavily treated piling by the extraction of borings, by R. H. Baechler. AWPA Proc. 1958, Vol. 54, pp. 34-43.
 - *Decay and toughness losses in southern pine infected by peniophora, by R. M. Lindgren and E. C. O. Erickson. For. Prod. Jour. 6(6):201-204, June 1957.
 - *Influence of fungus infection associated with chemipeeling on pressure impregnation and cold soaking of jack pine posts, by E. Panek. For. Prod. Jour. 7(4):124-127, Apr. 1957.
- First report on tests of service life of poles in REA--financed electric systems, by J. W. Kulp and J. O. Blew. Rural Electrification Administration Bull. 169-29, May 1955.

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Posts, Poles, and Piling (continued)

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Seasoning and checking of timbers before and after treatment, by J. D. MacLean. AWPB Proc. 1956, Vol. 52, pp. 35-48.

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- *2206 Inspection of preservative treatment of poles, by R. H. Baechler. 1960.
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OTHER PUBLICATION LISTS ISSUED BY THE
FOREST PRODUCTS LABORATORY

The following lists of publications which deal with the other investigative projects of the Forest Products Laboratory are obtainable upon request:

Boxing and Crating--Strength and serviceability of shipping containers, methods of packing.

Building Construction Subjects--Partial list of Government publications of interest to architects, builders, engineers, and retail lumbermen.

Chemistry of Wood and Derived Products--Chemical properties and uses of wood and chemical wood products, such as turpentine, alcohol, and acetic acid.

Fire Protection--Fire test methods, fire retarding chemicals and treatments, and fire behavior of treated and untreated wood, wood products, and wood structures.

Fungus Defects in Forest Products--Decay, stains, and molds in timber buildings, and various wood products; antiseptic properties of protective materials.

Furniture Manufacturers, Woodworkers and Teachers of Woodshop Practice--Partial list of Government publications on growth, structure, and identification of wood; moisture content, physical properties, air seasoning, and kiln drying; grading, manufacturing, and waste utilization; strength and related properties and joints and fastenings; glues and gluing, veneer and plywood fabrication; box and crate construction.

Glue and Plywood--Development of waterproof glues, preparation and application of various glues, plywood manufacturing problems.

Growth, Structure, and Identification of Wood--Structure and identification of wood; the effect of cellular structure of wood on its strength, shrinkage, permeability, and other properties; the influence of environmental factors such as light, soil, moisture, and fire, on the quality of wood produced; and secretions of economic value produced by trees and their exploitation.

OTHER PUBLICATION LISTS ISSUED BY THE
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Logging, Milling, and Utilization of Timber Products--Methods and practices in the lumber-producing and wood-consuming industries; standard lumber grades, sizes, and nomenclature; production and use of small dimension stock; specifications for small wooden products; uses for little-used species and commercial woods; and low-grade and wood-waste surveys.

Mechanical Properties of Timber--Strength of timber and factors affecting strength; design of wooden articles, or parts where strength or resistance to external forces is of importance.

Pulp and Paper--Suitability of various woods for pulp and paper; fundamental principles underlying the pulping and bleaching processes; methods of technical control of these processes; relation of the chemical and physical properties of pulps and the relation of these properties to the papermaking qualities of the pulps; waste in the industry, for example, decay in wood and pulp, utilization of bark, white water losses, etc.

Seasoning of Wood--Experimental and applied kiln drying, physical properties, air drying, steam bending.

Structural Sandwich, Plastic Laminates, and Wood-Base Aircraft Components--Strength, selection, and character of aircraft wood, plywood, and wood and composite laminated and sandwich materials; fabrication and assembly problems; methods of calculating the strength.

Thermal Properties of Wood--General information and the results of research on how wood is affected by and transmits heat.

Wood Finishing Subjects--Effect of coatings in preventing moisture absorption; painting characteristics of different woods, and weathering of wood.

Note: Since Forest Products Laboratory publications are so varied in subject matter, no single big list is issued. Instead, a list is made up to cover each field of Laboratory investigation. Twice a year, December 31 and June 30, a list is made up showing new reports for the previous 6 months. This is the only item sent regularly to the Laboratory's mailing list. Anyone who has asked for and received the proper subject lists and who has had his name placed on the mailing list can keep up to date on Forest Products Laboratory publications. Each subject list carries descriptions of all other subject lists.

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